

**HEWLETT PACKARD COMPANY**

Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, Colorado 80527-2400



**PATENT APPLICATION**  
ATTORNEY DOCKET NO. 10010692-1

**IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE**

**Inventor(s):** Charlie Udom, et al.

**Confirmation No:** 9664

**Application No:** 09/917,016

**Examiner:** Mark R. Milia

**Filing Date:** July 26, 2001

**Group Art Unit:** 2622

**SUBJECT:** VERSATILE PRINTING FROM PORTABLE ELECTRONIC DEVICES

**COMMISSIONER FOR PATENTS**

**P.O. Box 1450**

**Alexandria, VA 22313-1450**

**Sir:**

**DECLARATION UNDER RULE § 1.131**

This declaration is for the purpose of overcoming rejections based on WO 01/42894 A1, first published on June 14, 2001.

We hereby declare that:

1. We are the inventors of the subject matter of the claims of the present application.
2. We conceived the subject matter of the claims of the present application before June 14, 2001. For example, the invention was described in two invention disclosures that we prepared and submitted to Hewlett-Packard Company before June 14, 2001.
3. Exhibit A enclosed herewith as part of this declaration are partial pages copied from two invention disclosure, with dates redacted, which we prepared and submitted to Hewlett-Packard Company prior to June 14, 2001.
4. We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

BY: Charlie Udom  
Charlie Udom, Co-inventor

DATE: 09 FEB 2006

BY: John W. Atwood  
John Atwood, Co-inventor

DATE: 24 Jan '06

BY: Keith M. Taylor  
Keith M. Taylor, Co-inventor

DATE: 30 JAN 2006

BY: William P. Brown  
William P. Brown, Co-inventor

DATE: 07 FEB 2006



Exhibit A

**6. Enter the detailed description of the problem and your solution below. Include any other information (drawings, graphs, flowcharts, code, notebooks, etc) that will help make your invention more understandable.**

**Problem:**

Current direct IR/Bluetooth printing solutions only provide basic formatting such as font size, bold, and simple alignment. Also, the layout of the output is fixed.

**Solution:**

By providing high-impact graphics and pre-defined layouts in device-side templates, information such as contacts, appointments, notes, task lists, etc. can then be printed directly via IR or Bluetooth with the resulting output being much higher in presentation-quality than with simple formatting. When the user attempts to print something, the list of available templates will appear (with corresponding pictures or descriptions). The user can then select the desired template to apply to the information to be printed. For example, if the user wishes to print out a "business card," the user would select one of the business card templates, perhaps one with the user's company logo and design layout. Another example could be that the user has some report stored as a note on the device and wishes to print out a copy to submit to the boss. The user could select a template with the company letterhead at the top and the user's signature information at the bottom. As seen in the previous examples, these templates will be customizable. In addition, the user can upload other templates to the device as well as remove the pre-installed ones in order to save space.

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**Overview:**

Mobile PrintButton will allow e-services to provide ANYTIME, ANYWHERE printing of rich content (w/ embedded ads, coupons, etc.) from Pocket PC and Palm-like devices via multiple, user-selected, printing mechanisms in ONE INTEGRATED SOLUTION.

**Problem:**

Currently, there is no seamless printing solution for printing rich content from PDA devices. Existing printing models only allow direct IR printing from the device to an IR-enabled printer. They exist as a separate non-integrated application that will only print documents residing on the device. The richness,

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# HEWLETT-PACKARD COMPANY INVENTION DISCLOSURE

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as well as the number, of large-sized documents is limited by the relatively low storage capacity of these type of devices. In addition, delivery of very large-sized documents to these devices (especially wirelessly) is not very practical. Also, the user may require different solutions for different situations. For example, if the user is away from the office or a PC and does not have wireless access, the user may wish to have the print request queued up until the next sync is possible. If an IR-enabled printer or kiosk is nearby, the user may wish to simply squirt the request directly from the device to obtain an immediate hi-resolution printout. Mobile PrintButton will provide all of these solutions in one integrated solution.

## **Solution:**

Over the last few months, the Mobile Appliances Team has investigated various printing models including print via sync, wireless print to a pre-designated printer, direct print, and print by reference where the delivered content is scaled-down and the printed content is the full, hi-resolution version. The demos we have presented in the past have been disjoint and have usually been centered around a current project such as Instant Delivery, NMPS, or Sundance. However, Mobile PrintButton will be a seamless integration of all these (as well as future) printing models that can be applied to any content delivered to a device through any e-service. This content could range from company financial reports for a mobile executive to glossy, hi-resolution prints of the latest teen pop stars (complete with ads and clippable coupons) for the younger crowd. Mobile PrintButton will work on high-end wireless devices such future Jornadas to low-end Calypso-type devices. Possible output devices include traditional DeskJet printers, LaserJet printers, All-In-One devices, IR-enabled internet-connected printers, Bluetooth internet-enabled printers, or public kiosks.

These various printing technologies will be combined into one module that will reside on the device and be accessible to the device's associated browser. On the Pocket PC, the module will be an ActiveX Control for Pocket IE. On the Palm (non-wireless), it will be a POD for the AvantGo browser. On the Palm VII (wireless), it will be PRC application for the Web Clipper browser. When a user taps on the "Mobile Print" button, a dialog will pop up displaying the following choices:

Print via:

- \_ IR by reference
- \_ Bluetooth by reference
- \_ Wireless to pre-specified printer
- \_ Synchronization
- \_ IR direct

The user can then make a choice based on which solution best fits the situation, which may depend on one or more of the following: device capability, capability of output device, availability of output device, and availability of wireless service. Only the print options that the user selected during installation will be presented. The Mobile PrintButton module will determine which ones to display by detecting whether or not certain sub-components were installed. If the user only chose one, the pop-up dialog will be bypassed and the print action will be immediately invoked upon tapping the print button.

Deployment of Mobile PrintButton would simply require adding the Mobile PrintButton code (html or javascript) to the content (HTML formatted for the device) and installation of the appropriate module for the particular device. Using Bluestone Total-e-Wireless, we can detect which device a request is coming from and deliver the content with the appropriate embedded code to access a particular Mobile PrintButton module.

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